

Supplemental Table 2. Details of studies on breastfeeding and ovarian cancer risk

Author (year of publication) [Ref]	Country	Age (y)	Study period	No. of cases	No. of controls (cohort ¹)	Outcome	Breast-feeding (mo)	RR (95% CI)	Study quality ²	Comment
Cohort study										
Danforth et al. 2007 [B01]	USA	30-55 /20-42	1986-2002 /1993-2003	391	(149 693)	EOC	Never 1-6 7-11 12-17 18+	1.00 (reference) 0.96 (0.76, 1.21) 0.76 (0.52, 1.11) 0.82 (0.54, 1.24) 0.66 (0.46, 0.96)	8	The Nurses' Health Study and Nurses' Health Study II Study quality: [Selection: 2, Comparability: 2, Outcome: 3] Adjusted for age, parity, duration of oral contraceptive use, tubal ligation, age at menarche
Tsilidis et al. 2011 [B02]	10 European countries	50.4 ⁵	1992-2006	878	(327 396)	EOC	≤1 2-6 7-12 >3	1.00 (reference) 0.84 (0.68, 1.03) 0.91 (0.72, 1.14) 0.66 (0.46, 0.96)	8	The European Prospective Investigation into Cancer and Nutrition cohort Study quality: [Selection: 4, Comparability: 2, Outcome: 2] Adjusted for age and oral contraceptive use
Case-control study										
Booth et al. 1989 [B03]	UK	(52.4/51.4) ⁵	1978-1983	235	451	EOC	Never ≤6 7-12 13-18 19-24 ≥25	1.0 (reference) ³ 0.3 (0.8, 2.2) ³ 0.9 (0.5, 1.6) ³ 1.2 (0.5, 2.5) ³ 2.1 (0.7, 6.7) ³ 3.4 (1.1, 10.8) ³	6	Unmatched Study quality: [Selection: 3, Comparability: 2, Outcome: 1] Adjusted for age, number of live births
Gwinn et al. 1990 [B04]	UK	20-54	1980-1982	436	3833	EOC	Never 1-2 3-5 6-11 12-23 ≥24	1.0 0.6 ⁴ 0.8 ⁴ 0.8 ⁴ 0.7 ⁴ 0.3 ⁴	7	Unmatched Study quality: [Selection: 4, Comparability: 1, Outcome: 2] Adjusted for pregnancy, oral contraceptive use, age
Siskind et al. 1997 [B05]	Australia	18-79	1990-1993	824	855	EOC	Never 1-6 7-12 13-24 25-36 >36	1.00 (reference) 0.89 (0.65, 1.21) 0.68 (0.49, 0.94) 0.84 (0.59, 1.20) 0.69 (0.38, 1.27) 0.77 (0.34, 1.75)	7	Matched for age and residence Study quality: [Selection: 4, Comparability: 2, Outcome: 1] Adjusted for number of live born children, age, use of oral contraceptives, education, smoking history
Hirose et al. 1999 [B06]	Japan	(51.8/48.5) ⁵	1998-1995	95	25 488	EOC	Never 1-5 6-11 ≥12	1.00 (reference) 0.89 (0.39, 2.03) 1.18 (0.54, 2.60) 0.70 (0.31, 1.55)	5	Unmatched Study quality: [Selection: 4, Comparability: 2, Outcome: 1] Adjusted for age, body mass index
Ness et al. 2000 [B07]	USA	20-69	1994-1998	767	1367	EOC	Never 1-5 6-11 12-23 ≥24	1.0 (reference) ³ 0.9 (0.7, 1.2) ³ 0.9 (0.6, 1.3) ³ 0.7 (0.5, 1.1) ³ 0.6 (0.4, 1.0) ³	7	Study quality: [Selection: 4, Comparability: 2, Outcome: 1] Adjusted for age, number of pregnancies, family history of ovarian cancer, race, oral contraceptive use, tubal ligation, hysterectomy and breast-feeding
Riman et al. 2001 [B08]	Sweden	50-74	1993-1995	193	3899	BOT	Never 1-5 6-11 ≥12	1.00 (reference) 0.72 (0.38, 1.36) 0.52 (0.28, 1.00) 0.47 (0.24, 0.94)	9	Frequency matched by age Study quality: [Selection: 4, Comparability: 2, Outcome: 3] Adjusted for age, body mass index, age at menopause, duration of oral contraceptive use

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Riman et al. 2002 [B09]	Sweden	50-74	1993-1995	655	3899	Invasive EOC	Never 1-5 6-11 ≥12	1.00 (reference) 0.99 (0.64, 1.52) 0.77 (0.50, 1.19) 0.87 (0.56, 1.35)	9	Study quality: [Selection: 4, Comparability: 2, Outcome: 3] Adjusted for age, body mass index, age at menopause, duration of oral contraceptive use as categorized variables, any lifetime use of hormone replacement therapy
Tung et al. 2003 [B10]	USA	≥18	1993-1999	558	607	EOC	Never ≤5 6-12 >12	1.0 (reference) ³ 0.6 (0.4, 0.7) ³ 0.6 (0.4, 0.9) ³ 0.6 (0.4, 0.9) ³	7	Matched to cases with an approximate 1:1 ratio on the basis of specific ethnicity (e.g., Japanese), age (year of birth ±5 y), and study site Study quality: [Selection: 3, Comparability: 2, Outcome: 2] Adjusted for age, ethnicity, study site, education, tubal ligation, hormone replacement therapy, and ovulation variables
Mills et al. 2004 [B11]	USA	≥18	2000-2001	256	1122	EOC	Never <6 6-11 12-23 ≥24	1.00 (reference) 0.37 (0.16, 0.83) 0.42 (0.20, 0.90) 0.41 (0.19, 0.90) 0.36 (0.16, 0.80)	7	Frequency matched on age and ethnicity Study quality: [Selection: 4, Comparability: 2, Outcome: 1] Adjusted for age, race, ethnicity, oral contraceptive use and breastfeeding
Rossing et al. 2004 [B12]	USA	35-54	1994-1998	378	1637	EOC	Never <6 6-12 ≥12	1.0 (reference) ³ 0.9 (0.7, 1.3) ³ 0.8 (0.5, 1.2) ³ 0.5 (0.3, 0.7) ³	6	Matched for area of residence and age Study quality: [Selection: 3, Comparability: 2, Outcome: 1] Adjusted for age, race and study site
Huusom et al. 2006 [B13]	Denmark	35-79	1995-1999	202	1564	BOT	Never 1-5 6-11 12-24 ≥25	0.97 (0.50, 1.86) 1.00 (reference) 0.73 (0.48, 1.13) 0.93 (0.57, 1.50) 0.32 (0.11, 0.95)	7	Frequency matched in 5 y intervals by using age distribution women with ovarian cancer Study quality: [Selection: 4, Comparability: 2, Outcome: 1] Adjusted for age, age at first birth, duration of oral contraceptives smoking, intake of milk
Moorman et al. 2008 [B14]	USA	20-74	1999-2006	869	967	EOC	Never <6 6-12 >12	1.00 (reference) 0.78 (0.68, 1.12) 0.74 (0.43, 0.80) 0.92 (0.51, 1.40)	7	Frequency matched by age and race Study quality: [Selection: 4, Comparability: 2, Outcome: 2] Crude OR
Kurta et al. 2012 [B15]	USA	≥25	2003-2008	902	1802	EOC	Never <6 6-11 ≥12	1.00 (reference) 0.60 (0.47, 0.76) 0.54 (0.40, 0.72) 0.46 (0.36, 0.59)	7	Frequency matched by age (5 y categories) Telephone area code through random digit dialing Study quality: [Selection: 4, Comparability: 2, Outcome: 1] Adjusted for age, race, education

EOC, epithelial ovarian cancer; OC, ovarian cancer; BOT, borderline ovarian tumor; OR, odds ratio; RR, relative risk; CI, confidence interval.

¹Number of total cohort.

²Study quality was judged based on the Newcastle-Ottawa Scale (range, 1-9 points).

³Values is listed to 1 decimal point in the original data.

⁴The 95% CI was not presented in the original article.

⁵Mean age.

B01. Danforth KN, Tworoger SS, Hecht JL, Rosner BA, Colditz GA, Hankinson SE. Breastfeeding and risk of ovarian cancer in two prospective cohorts. *Cancer Causes Control* 2007;18(5):517-523.

B02. Tsilidis KK, Allen NE, Key TJ, Dossus L, Lukanova A, Bakken K, et al. Oral contraceptive use and reproductive factors and risk of ovarian cancer in the European Prospective Investigation into Cancer and Nutrition. *Br J Cancer* 2011;105(9):1436-1442.

B03. Booth M, Beral V, Smith P. Risk factors for ovarian cancer: a case-control study. *Br J Cancer* 1989;60(4):592-598.

B04. Gwinn ML, Lee NC, Rhodes PH, Layde PM, Rubin GL. Pregnancy, breast feeding, and oral contraceptives and the risk of epithelial ovarian cancer. *J Clin Epi-*

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- B05. Siskind V, Green A, Bain C, Purdie D. Breastfeeding, menopause, and epithelial ovarian cancer. *Epidemiology* 1997;8(2):188-191.
- B06. Hirose K, Tajima K, Hamajima N, Kuroishi T, Kuzuya K, Miura S, et al. Comparative case-referent study of risk factors among hormone-related female cancers in Japan. *Jpn J Cancer Res* 1999;90(3):255-261.
- B07. Ness RB, Grisso JA, Klapper J, Schlesselman JJ, Silberzweig S, Vergona R, et al. Risk of ovarian cancer in relation to estrogen and progestin dose and use characteristics of oral contraceptives. *Am J Epidemiol* 2000;152(3):233-241.
- B08. Riman T, Dickman PW, Nilsson S, Correia N, Nordlinder H, Magnusson CM, et al. Risk factors for epithelial borderline ovarian tumors: results of a Swedish case-control study. *Gynecol Oncol* 2001;83(3):575-585.
- B09. Riman T, Dickman PW, Nilsson S, Correia N, Nordlinder H, Magnusson CM, et al. Risk factors for invasive epithelial ovarian cancer: results from a Swedish case-control study. *Am J Epidemiol* 2002;156(4):363-373.
- B10. Tung KH, Goodman MT, Wu AH, McDuffie K, Wilkens LR, Kolonel LN, et al. Reproductive factors and epithelial ovarian cancer risk by histologic type: a multiethnic case-control study. *Am J Epidemiol* 2003;158(7):629-638.
- B11. Mills PK, Riordan DG, Cress RD. Epithelial ovarian cancer risk by invasiveness and cell type in the Central Valley of California. *Gynecol Oncol* 2004;95(1):215-225.
- B12. Rossing MA, Tang MT, Flagg EW, Weiss LK, Wicklund KG. A case-control study of ovarian cancer in relation to infertility and the use of ovulation-inducing drugs. *Am J Epidemiol* 2004;160(11):1070-1078.
- B13. Huusom LD, Frederiksen K, Høgdall EV, Glud E, Christensen L, Høgdall CK, et al. Association of reproductive factors, oral contraceptive use and selected lifestyle factors with the risk of ovarian borderline tumors: a Danish case-control study. *Cancer Causes Control* 2006;17(6):821-829.
- B14. Moorman PG, Calingaert B, Palmieri RT, Iversen ES, Bentley RC, Halabi S, et al. Hormonal risk factors for ovarian cancer in premenopausal and postmenopausal women. *Am J Epidemiol* 2008;167(9):1059-1069.
- B15. Kurta ML, Moysich KB, Weissfeld JL, Youk AO, Bunker CH, Edwards RP, et al. Use of fertility drugs and risk of ovarian cancer: results from a U.S.-based case-control study. *Cancer Epidemiol Biomarkers Prev* 2012;21(8):1282-1292.